

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P. D. Dox 1450
Alexandria, Virginia 22313-1450
www.usplo.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------|----------------------|------------------------|------------------|
| 10/072,638 | 02/07/2002 | Victor Steven LaFay | 024295-261 | 3249 |
| 27805 7 | 590 04/15/2004 | | EXAMINER | |
| THOMPSON HINE L.L.P. | | | CAMERON, ERMA C | |
| 2000 COURTHOUSE PLAZA, N.E. 10 WEST SECOND STREET DAYTON, OH 45402 | | | ART UNIT | PAPER NUMBER |
| | | | 1762 | |
| | | | DATE MAILED: 04/15/200 | 4 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | 1t- |
|--|--|--|------|
| | Application No. | Applicant(s) | |
| | 10/072,638 | LAFAY ET AL. | • |
| Office Action Summary | Examiner | Art Unit | |
| | Erma Cameron | 1762 | |
| The MAILING DATE of this communication a Period for Reply | ppears on the cover sheet wi | th the correspondence address | |
| A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is-less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perion - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b). | 1. 1.136(a). In no event, however, may a reply within the statutory minimum of third will apply and will expire SIX (6) MON ute, cause the application to become AE | eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communicat | ion. |
| Status | | | |
| 1)☐ Responsive to communication(s) filed on 2a)☑ This action is FINAL. 2b)☐ The solution of the second in accordance with the practice under the second in accordance with the practice. | nis action is non-final. vance except for formal matt | · | is |
| Disposition of Claims | | | |
| 4) ☐ Claim(s) 1-28 is/are pending in the application 4a) Of the above claim(s) 1-6,10-13,16-18,21 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 7-9,14,15 and 23-26 is/are rejected 7) ☐ Claim(s) 19 and 20 is/are objected to. 8) ☐ Claim(s) are subject to restriction and | 1 <u>,22,27 <i>and 28</i> is/are</u> withdra | awn from consideration. | |
| Application Papers | | | |
| 9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) as Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the I | ccepted or b) objected to ne drawing(s) be held in abeyar ection is required if the drawing | nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121 | (d). |
| Priority under 35 U.S.C. § 119 | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a list | nts have been received. nts have been received in A iority documents have been au (PCT Rule 17.2(a)). | pplication No received in this National Stage | |
| Attachment(s) | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date | Paper No(s | Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152) | |

Art Unit: 1762

Response to Amendment

1. Applicant's arguments filed 3/12/2004 have been fully considered but they are not fully persuasive.

Election/Restrictions

2. Claims 1-6, 10-13, 16-18, 21-22 and 27-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the paper filed 3/12/2004.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 7-9, 14-15 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over CN 1069432.
- '432 teaches a binder comprising petroleum pitch and vegetable oil (at 50% or less), such as corn oil (see pages 4-11 of translation), for sand casting.

Art Unit: 1762

'432 does not refer to the petroleum product as mineral seal oil, but it would appear that the petroleum product of '432 and mineral seal oil are similar materials.

'432 does not teach the VOC or benzene levels, but does disclose that the composition does not have aromatic hydrocarbons (p 10), which would include benzene.

The applicant has argued in the 3/12/2004 response that the composition is not a release composition. However, the '432 reference clearly teaches that the composition aids in separating the cast part from the sand mold, and effectively prevents the defects of sand attachment (p 10). The applicant further argues that the composition "would most likely fall outside the VOC limits set forth in the claims". However, the applicant has not attempted to prove this.

5. The rejection of Claims 7-9, 12-15, 19-20 and 23-26 under 35 U.S.C. 103(a) as being unpatentable over Laemmle et al (4522250), is withdrawn because of the response filed 3/12/2004.

'250 does not teach sand molds.

Allowable Subject Matter

6. Claims 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1762

7. The following is a statement of reasons for the indication of allowable subject matter:
The prior art does not disclose nor suggest the coating method of claim 7 wherein the coating composition comprises vegetable oil, mineral seal oil and a long chain fatty acid.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erma Cameron whose telephone number is 571-272-1416. The examiner can normally be reached on 8:30-6:00, alternate Fridays off.

Application/Control Number: 10/072,638

Art Unit: 1762

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 571-272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ERMA CAMERON PRIMARY EXAMINER Erma Cameron Primary Examiner Art Unit 1762

April 10, 2004